

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

AUG 1 2 2009

REPLY TO THE ATTENTION OF: AE - 17J

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Douglas J. Weber, Attorney FirstEnergy Corporation 76 South Main Street Akron, Ohio 44308

RE:

Notice and Finding of Violation issued to First Energy

(Note: Attachments contain Confidential Business Information)

Dear Mr. Weber:

The U. S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to First Energy Corporation (First Energy). This NOV/FOV is issued in accordance with Section 113(a) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a).

EPA has determined that First Energy is violating the Prevention of Significant Deterioration requirements under Section 165 of the Act, 42 U.S.C. § 7475, Nonattainment New Source Review requirements under Sections 171 – 193 of the Act, 42 U.S.C. §§ 7501-7515, visible emissions provisions contained in Ohio Administrative Code (OAC) 3745-17-07(A) of the Ohio State Implementation Plan (Ohio SIP), and the Operating Permit requirements under Title V of the Act, 42 U.S.C. §§ 7661 – 7661e at its Eastlake, Lake Shore, Bay Shore, and Ashtabula generating stations. Some of these violations arose from various projects undertaken by First Energy over the years; others are violations that are evidenced by the Continuous Opacity Monitors (COMS) data provided by First Energy for these facilities.

EPA is offering you an opportunity to confer with us about the violations cited in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violations, and the steps you will take to bring the facilities into compliance. Please plan for your technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Ethan Chatfield. You may call him at (312) 886-5112, to request a conference. You should make your request for a conference no later than 10 calendar days after you receive this letter, and we should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely yours,

heryl/L. Newtor

Firector

Air and Radiation Division

Enclosure

cc: Michael Horvath, P.E.

First Energy

Robert Hodanbosi

Ohio Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
)
) .
First Energy) Proceedings Pursuant to
Akron, Ohio) Section 113(a)(1) and (a)(3) of the
) Clean Air Act,
) 42 U.S.C. §7413(a)(1) and (a)(3)
)) EPA-5-09-OH-20
	,)
)

NOTICE OF VIOLATION AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation and Finding of Violation (Notice) under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). The authority to issue this NOV/FOV has been delegated to the Regional Administrator of the U.S. Environmental Protection Agency Region 5, and redelegated to the Director, Air and Radiation Division.

EPA finds that First Energy is violating the Clean Air Act (Act), 42 U.S.C. §§ 7401 *et seq.*, at its Eastlake, Lake Shore, Bay Shore and Ashtabula generating stations.

STATUTORY AND REGULATORY BACKGROUND

1. The Clean Air Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

The National Ambient Air Quality Standards

- 2. Section 108(a) of the Act, 42 U.S.C. § 7408(a), requires the Administrator of EPA to identify and prepare air quality criteria for each air pollutant, emissions of which may endanger public health or welfare, and the presence of which results from numerous or diverse mobile or stationary sources. For each such "criteria" pollutant, Section 109 of the Act, 42 U.S.C. § 7409, requires EPA to promulgate national ambient air quality standards ("NAAQS") requisite to protect the public health and welfare.
- 3. Pursuant to Sections 108 and 109, 42 U.S.C. §§ 7408 and 7409, EPA has identified ozone, particulate matter 2.5 micrometer in diameter or less $(PM_{2.5})$, particulate matter 10 micrometer in diameter or less (PM_{10}) , and sulfur dioxide (SO_2) , as

criteria pollutants, and has promulgated NAAQS for such pollutants. 40 C.F.R. §§ 50.4 - 50.7, 50.8 - 50.10, 50.13 and 50.15.

- 4. Under Section 107(d) of the Act, 42 U.S.C. § 7407(d), each state is required to designate those areas within its boundaries where the air quality is better or worse than the NAAQS for each criteria pollutant, or where the air quality cannot be classified due to insufficient data. An area that meets the NAAQS for a particular pollutant is termed an "attainment" area with respect to such pollutant. An area that does not meet the NAAQS for a particular pollutant is termed a "nonattainment" area with respect to such pollutant.
- 5. An area that cannot be classified as either "attainment" or "nonattainment" with respect to a particular pollutant due to insufficient data is termed "unclassifiable" with respect to such pollutant.
- 6. The attainment or nonattainment status of the locations relevant to this NOV/FOV are listed below under the Factual Background Section.

Prevention of Significant Deterioration Requirements

- 7. When the Act was passed in 1970, Congress exempted existing facilities from many of its requirements. However, Congress also made it quite clear that this exemption would not last forever. As the United States Court of Appeals for the D.C. Circuit explained in *Alabama Power v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979), "[t]he statutory scheme intends to 'grandfather' existing industries; but...this is not to constitute a perpetual immunity from all standards under the PSD program." Rather, the Act requires grandfathered facilities to install modern pollution control devices whenever the unit is proposed to be modified in such a way that its emissions may increase.
- 8. On June 19, 1978, EPA promulgated regulations pursuant to Part C of Title I of the Act. 43 Fed. Reg. 26403 (June 19, 1978).
- 9. The Prevention of Significant Deterioration (PSD) provisions of Part C of Title I of the Act require preconstruction review and permitting of stationary sources in attainment/unclassifiable areas See 42 U.S.C. §§ 7470-7492. Pursuant to applicable regulations, if a major stationary source located in an attainment area is planning to make a major modification, then that source must obtain a PSD permit before beginning actual construction. See 40 C.F.R. § 52.21(a)(2)¹. To obtain this permit, the source must, among other things, undergo a technology review and apply Best Available Control Technology (BACT); perform a source impact analysis; perform an air quality analysis and modeling; submit appropriate information; and conduct additional impact analyses as required.
- 10. On August 7, 1980, EPA incorporated by reference the provisions of 40 C.F.R. § 52.21(b) through (w) into the Ohio SIP, 45 *Fed. Reg.* 52741, and codified at 40 C.F.R. § 52.1884. On January 29, 1981, EPA delegated to the Ohio Environmental

¹ Prior to March 3, 2003, See 40 C.F.R. § 52.21(i).

Protection Agency (OEPA) the authority to review and process PSD permit applications, and to implement the federal PSD program. 46 Fed. Reg. 9580 (effective May 1, 1980). On October 10, 2001, EPA conditionally approved Ohio's PSD SIP provisions. 66 Fed. Reg. 51570. On January 22, 2003, EPA fully approved Ohio's PSD SIP provisions, 68 Fed. Reg. 2909 (effective on February 21, 2003). The Ohio PSD provisions are codified at Ohio Administrative Code 3745-31-11 to 3745-31-20.

- 11. The regulations in effect at the time of the projects identified in Appendices A through D are the relevant regulations for the purposes of this NOV/FOV.
- 12. 40 C.F.R § 52.21(a)(2)(iii) provides that "no new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements."
- 13. The PSD regulations, since March 3, 2003, define regulated NSR pollutant as "(i) Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds and NOx are precursors for ozone; ..." 42 C.F.R. §52.21(b)(50).
- 14. The PSD regulations define "major stationary source" as, "Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British Thermal Units per hour heat input..."

 40 C.F.R § 52.21(b)(1)(i)(a). 4
- 15. The PSD regulations define "major modification" as "any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase... of a regulated NSR pollutant...; and a significant net emissions increase of that pollutant from the major stationary source".

 40 C.F.R § 52.21(b)(2)(i).
- 16. The PSD regulations state that "net emissions increase" means "the amount by which the sum of the following exceeds zero: (a) The increase in emissions from a particular

² EPA's January 22, 2003, approval of the PSD provisions of the Ohio SIP does not address EPA's NSR Reform.

³ Prior to March 3, 2003, 40 C.F.R § 52.21(i)(2) provided that "the requirements of paragraphs (j) through (r) of this section apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Act...."

⁴ Prior to March 3, 2003, the PSD regulations defined "major stationary source" as, "Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tones per year or more of any pollutant subject to regulation under the Act: Fossil fuel-fired steam electric plants of more than 250 million British Thermal Units per hour heat input ..." 40 C.F.R § 52.21(b)(1)(i)(a)

⁵ Prior to March 3, 2003, the PSD regulations defined "major modification" as "any physical change in or change in the method of operation of a major source that would result in a significant net emissions increase" of a regulated pollutant. 40 C.F.R § 52.21(b)(2)(i)

physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section; and (b) Any other increases or decreases in actual emissions at the major stationary sources that are contemporaneous with that particular change and are otherwise creditable." 40 C.F.R § 52.21(b)(3)(i).

- 17. The PSD regulations state that "Significant" means, "in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates: ... Nitrogen oxides: 40 tpy; Sulfur dioxide: 40 tpy; Particulate Matter: 25 tpy of particulate matter emissions; 15 tpy of PM₁₀ emissions; 10 tpy of direct PM_{2.5} emissions..." 40 C.F.R § 52.21(b)(23)(i).⁶
- 18. The PSD regulations define "actual emissions" as "the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal operation." 40 C.F.R. § 52.21(b)(21)(i)-(ii).
- 19. Under the PSD regulations, "construction" means "any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions." 40 C.F.R. § 52.21(b)(8); see also 42 U.S.C. § 7479(2)(C) ("construction" includes the "modification" (as defined in Section 111(a) of the Act, 42 U.S.C. § 7411(a)) of any source or facility). §
- 20. If a source is a major stationary source in an attainment or unclassifiable area planning to construct a major modification under the foregoing definitions, then it is subject to the requirements of paragraphs (j) through (r) of 40 C.F.R. § 52.21.
- 21. 40 C.F.R § 52.21(j) requires that: 1) a major stationary source or major modification meet all applicable emissions limitations under the State Implementation Plan along with any standards of performance under 40 C.F.R. Parts 60 and 61; 2) any new major stationary sources apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts; and 3) a major modification apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts.⁹

Prior to July 16, 2008, the PSD regulations stated that "Significant means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emission that would equal or exceed any of the following rates: ... Nitrogen oxides: 40 tpy; Sulfur dioxide: 40 tpy; Particulate Matter: 25 tpy of particulate matter emissions; 15 tpy of PM₁₀ emissions ..." 40 C.F.R § 52.21(b)(i)(23)(i).

Prior to March 3, 2003, the PSD regulations defined "actual emissions" as the average rate, in tons per year, at which the unit "actually emitted the pollutant during a two-year period which precedes the particular date" and which is representative of normal operation. 40 C.F.R. § 52.21(b)(21)(i)-(ii). In addition, for any emissions unit that "has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date." 40 C.F.R. § 52.21(b)(21)(iv).

Prior to March 3, 2003, the PSD regulations defined, "construction" to mean "any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit)" that "would result in a change in actual emissions." 40 C.F.R. § 52.21(b)(8).

Prior to March 3, 2003, 40 C.F.R § 52.21(j) required that: 1) a major stationary source or major modification meet all applicable emissions limitations under the applicable State Implementation Plan along with any standards of performance under 40 C.F.R. Parts 60 and 61; 2) any new major stationary

Nonattainment New Source Review Requirements

- 22. The Nonattainment New Source Review (NNSR) provisions of Part D of Title I of the Act require preconstruction review and permitting for modifications of stationary sources located in nonattainment areas. See 42 U.S.C. §§ 7501-7515. Prior to the effective date of the 1990 Clean Air Act Amendments, P. Law 101-549, effective November 15, 1990, the NNSR provisions were set forth at 42 U.S.C. §§ 7501-7508. Pursuant to applicable regulations, if a major stationary source located in a nonattainment area is planning to make a major modification, then that source must obtain a NNSR permit before beginning actual construction. To obtain this permit, the source must, among other things, employ pollution controls that reflect the Lowest Achievable Emission Rate (LAER).
- 23. Under Section 172(c)(5) of the NNSR provisions of the Act, 42 U.S.C. § 7502(c)(5), each state is required to adopt NNSR SIP rules that include provisions to require permits that conform to the requirements of Section 173 of the Act, 42 U.S.C. § 7503, for the construction and operation of modified major stationary sources within nonattainment areas. Section 173 of the Act, in turn, sets forth a series of minimum requirements for the issuance of permits for major modifications to major stationary sources within nonattainment areas. 42 U.S.C. § 7503.
- 24. Section 173(a) of the Act, 42 U.S.C. 7503(a), provides that construction and operating permits may be issued if, *inter alia*:
 - "(a) sufficient offsetting emission reductions have been obtained to reduce existing emissions to the point where reasonable further progress towards meeting the national ambient air quality standards is maintained; and (b) the pollution controls to be employed will reduce emissions to the "lowest achievable emission rate."
- 25. On October 31, 1980, EPA conditionally approved Ohio's NNSR SIP rules. 45 Fed. Reg. 72119, which were codified in the Ohio Administrative Code ("OAC") at Chapters 3745-31-01 through 3745-31-08. On September 8, 1993, EPA provided limited approval of Ohio's NNSR SIP rules. 58 Fed. Reg. 47211; see 40 C.F.R. § 52.1870(c)(83). EPA provided final approval of Ohio's NNSR SIP rules on January 10, 2003. 68 Fed. Reg. 1366. The SIP rules, as amended, are codified in the Ohio Administrative Code (OAC) at Chapter 3745-31-01 through 3745-31-08. See 40 C.F.R. § 52.1870(c)(83).
- 26. Under Ohio's approved NNSR SIP rules, no person may undertake a major modification of an existing major stationary source in a nonattainment area without first

sources apply best available control technology for each pollutant subject to regulation under the Act that it would have the potential to emit in significant amounts; and 3) a major modification which would result in a significant net emissions increase apply best available control technology for each pollutant subject to regulation under the Act.

obtaining a NNSR "Permit to Install" from the Ohio Environmental Protection Agency (OEPA). OAC 3745-31-02(A).

- 27. In order to obtain a NNSR permit, the Ohio SIP requires that the owner or operator of a source undertaking a major modification must, *inter alia*: (a) comply with the lowest achievable emission rate as defined in Section 171(3) of the Act, 42 U.S.C. § 7501(3); (b) obtain Federally enforceable emission offsets at least as great as the new or modified source's emissions; (c) certify that all other major sources that it owns or operates within Ohio are in compliance with the Act; and (d) demonstrate that the benefits of the proposed source or modification significantly outweigh the environmental and social costs imposed as a result of its construction or modification. OAC Chapter 3745-31-05.
- 28. "Major modification" is defined by the Ohio NNSR SIP as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emission increase of any pollutant subject to regulation under the Act. OAC Chapter 3745-31-01(RR).
- 29. Under Ohio's approved NNSR SIP rules, a "major stationary source" of NOx is one that emits or has the potential to emit 100 tons per year or more, and a "significant" net emissions increase of NOx is one that results in increased emissions of 40 tons per year or more of this pollutant. OAC 3745-31-01(RR) and (SSS). "Net emissions increase" means "the amount by which the sum of the following exceeds zero: (a) [a]ny increase in actual emissions [as defined by the Ohio NNSR SIP rules, OAC Chapter 3745-31] from a particular physical change or change in method of operation at a stationary source; and (b) [a]ny other increases and decreases in actual emissions [as defined by the Ohio NNSR SIP rules, OAC Chapter 3745-31] at the source that are contemporaneous with the particular change and are otherwise creditable." OAC 3745-31-01(SS).

Title V Requirements

- 30. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), provides that no source may operate without a Title V permit after the effective date of any permit program approved or promulgated under Title V of the Act. EPA first promulgated regulations governing state operating permit programs on July 21, 1992. See 57 Fed. Reg. 32295; 40 C.F.R. Part 70. EPA promulgated regulations governing the Federal operating permit program on July 1, 1996. See 61 Fed. Reg. 34202; 40 C.F.R. Part 71.
- 31. Section 503 of the CAA, 42 U.S.C. § 7661b, sets forth the requirement to timely submit an application for a permit, including information required to be submitted with the application.
- 32. Section 504(a) of the CAA, 42 U.S.C. § 7661c(a), requires that each Title V permit include enforceable emission limitations and standards, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements, including those contained in a state implementation plan. 42 U.S.C. § 7661c(a).

- 33. 40 C.F.R. § 70.1(b) provides that: "All sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements." See also Ohio Administrative Code (OAC) 3745-77-07(A).
- 34. 40 C.F.R § 70.2 defines "applicable requirement" to include "(1) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act, including revisions to that plan promulgated in part 52 of this chapter . . ."
- 35. 40 C.F.R. § 70.3 provides that the requirements of Part 70 apply to any major source located in a state that has received whole or partial approval of its Title V program.
- 36. 40 C.F.R. § 70.7(b) provides that no source subject to 40 C.F.R. Part 70 requirements may operate without a permit as specified in the Act. See also OAC 3745-77-02(A).
- 37. 40 C.F.R. § 70.5(a) and (c) require timely and complete permit applications for Title V permits with required information that must be submitted and 40 C.F.R. § 70.6 specifies required permit content. See also OAC 3745-77-02(A).
- 38. 40 C.F.R. § 70.5(b) provides that: "Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit." See also OAC 3745-77-03(F).

Ohio's Title V Requirements

- 39. U.S. EPA promulgated full approval of the Ohio's Title V program on August 15, 1995. *See* 40 C.F.R. Part 70, Appendix A; 60 *Fed. Reg.* 42045. Ohio's Title V program became effective on October 1, 1995. *See* 60 *Fed. Reg.* 42045.
- 40. The Ohio regulations governing the Title V permitting program are codified at OAC 3745-77, and are federally enforceable pursuant to Section 113(a)(3).
- 41. OAC 3745-77-07(A) provides that the Title V permit "shall include emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at time of issuance."
- 42. OAC 3745-77-02(A) provides that "the owner or operator of the Title V source shall not operate such source after the date that a timely and complete Title V

permit application is required to be submitted, except in compliance with a permit issued under this Chapter."

43. OAC 3745-77-03(F) provides that "[a]ny applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit."

Standards for Opacity and Particulate Matter

- 44. U.S. EPA approved OAC Chapter 3745-17-07(A)(1) as part of the federally enforceable Ohio SIP on June 27, 1994. 59 Fed. Reg. 27464
- 45. OAC 3745-17-07(A)(1)(a) requires that visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average. The visible particulate emissions from any stack may exceed 20% opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60% opacity, as a six-minute average, at any time.

FACTUAL BACKGROUND

- 46. First Energy is incorporated in Ohio.
- 47. First Energy is a "person", as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).
- 48. From June 15, 2004 to present, the Eastlake, Lake Shore, and Ashtabula generating stations were located in areas classified as nonattainment for the 8-hr ozone standard. *See* 69 Fed. Reg. 23858 (April 30, 2004).
- 49. From June 15, 2004 until August 8, 2007, Bay Shore generating station was located in an area classified as nonattainment for the 8-hr ozone standard. *See* 69 Fed. Reg. 23858 (April 30, 2004); 72 Fed. Reg. 44784 (Aug. 9, 2007).
- 50. From April 5, 2005 to present, the Eastlake, Lake Shore, and Ashtabula generating stations were located in areas classified as nonattainment for fine particulates (PM_{2.5}). See 70 Fed. Reg. 944 (January 5, 2005).
- 51. From March 3, 1978 to May 6, 1996, the Eastlake, Lake Shore, and Ashtabula generating stations were located in areas classified as nonattainment for the 1-hr ozone standard. *See* 43 Fed. Reg. 8962 (March 3, 1978); 61 Fed. Reg. 20458 (May 7, 1996).

- 52. From March 3, 1978 to July 31, 1995, the Bay Shore generating station was located in an area classified as nonattainment for the 1-hr ozone standard. *See* 43 Fed. Reg. 8962 (March 3, 1978); 60 Fed. Reg. 39115 (Aug. 1, 1995).
- 53. From May 14, 1991 to January 9, 2001, the Lake Shore generating station was located in an area classified as nonattainment for PM₁₀. See 56 Fed. Reg. 11101 (March 15, 1991); 56 Fed. Reg. 56694 (November 6, 1991); 65 Fed. Reg. 77308 (Dec. 11, 2000).
- 54. From October 5, 1978 to February 27, 2005, the Lake Shore generating station was located in an area classified as nonattainment for SO₂. See 43 Fed. Reg. 45993 (October 5, 1978); 70 Fed. Reg. 4023 (January 28, 2005).
- 55. From October 5, 1978 to September 28, 1999, the Eastlake generating station was located in an area classified as nonattainment for SO₂. See 43 Fed. Reg. 45993 (October 5, 1978); 64 Fed. Reg. 47133 (August 30, 1999).
- 56. From October 5, 1978 to March 17, 2004, the Bay Shore generating station was located in an area classified as nonattainment for SO₂. See 43 Fed. Reg. 45993 (October 5, 1978); 69 Fed. Reg. 4856 (February 2, 2004).
- 57. At all other times relevant to this NOV/FOV, the Eastlake, Lake Shore, Bay Shore and Ashtabula generating stations were located in areas which were in attainment for 8-hr ozone standard, 1-hr ozone standard, PM_{2.5}, PM₁₀, SO₂, CO, and NO_x.
- 58. The Eastlake generating station is a fossil fuel-fired electric utility steam generating station located in Lake County, Ohio and has the potential to emit more than 100 tons per year each of NO_x, SO₂, and PM. The Plant consists of five coal-fired boilers. Units 1 through 3 are identical tangentially-fired boilers which commenced operation in or around 1952/3 and are each connected to an approximately 132 MW turbine generators. Unit 4 is a tangentially-fired boiler which commenced operation in or around 1956 and is connected to an approximately 240 MW turbine generator. Unit 5 is a cell burner boiler which commenced operation in or around 1972 and is connected to an approximately 597 MW turbine generator.
- 59. The Lake Shore generating station is a fossil fuel-fired electric utility steam generating station located in Cuyahoga County, Ohio and has the potential to emit more than 100 tons per year each of NO_x, SO₂, and PM. The Lake Shore plant consists of one remaining operational coal-fired unit. Unit 18 is a tangentially-fired boiler which commenced operation in or around 1962 and is connected to an approximately 245 MW turbine generator.
- 60. The Bay Shore generating station is a fossil fuel-fired electric utility steam generating station located in Lucas County, Ohio and has the potential to emit more

than 100 tons per year each of NO_x, SO₂, and PM. The Bay Shore plant consists of four operating coal-fired units. Unit 1 is a circulating fluidized bed petcoke and coal-fired boiler which began operation in 2000 and is connected to a 140 MW turbine. Unit 2 is a dry-bottom vertical coal-fired boiler which began operation in 1959 and is connected to a 138 MW turbine. Unit 3 is a dry bottom horizontal coal-fired boiler which began operation in 1963 and is connected to a 142 MW turbine. Unit 4 is a dry bottom horizontal coal-fired boiler which began operation in 1968 and is connected to a 215 MW turbine.

- 61. The Ashtabula generating station is a fossil fuel-fired electric utility steam generating station located in Ashtabula County, Ohio and has the potential to emit more than 100 tons per year each of NO_x, SO₂, and PM. The Ashtabula plant consists of one operating coal-fired unit. Unit 5 is a tangentially-fired coal boiler constructed in early 1958 and is connected to a 244 MW turbines.
- 62. The Eastlake, Lake Shore, Bay Shore, and Ashtabula generating stations are each "fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour." Therefore, each of these plants constitutes a "major stationary source" within the meaning of 40 C.F.R. § 52.21(b)(1)(i)(a); and a "major emitting facility" within the meaning of Section 169(1) of the Act, 42 U.S.C. § 7479(1).
- 63. First Energy completed physical changes and/or changes in the method of operation at its Eastlake generating station Units 1 through 5 as described in the attached Appendix A.
- 64. First Energy completed physical changes and/or changes in the method of operation at its Lake Shore generating station Unit 18 as described in the attached Appendix B.
- 65. First Energy completed physical changes and/or changes in the method of operation at its Bay Shore generating station Units 2, 3 and 4 as described in the attached Appendix C.
- 66. First Energy completed physical changes and/or changes in the method of operation at its Ashtabula generating station Unit 5 as described in the attached Appendix D.

67. Based upon review of Part 70 Operating Permit Quarterly Deviation and Compliance Monitoring Reports submitted by First Energy for the Eastlake, Lakeshore, Bay Shore, and Ashtabula generating stations for the time periods listed below, First Energy reported the violations of the 20 percent, 6-minute average opacity limitation summarized in Tables 1 through 4 below.

Table 1: Minutes of Violations of Opacity Limit for Eastlake Station:

Quarter/Year	Stack	Stack	Stack	Stack	Stack
Quarter/rear		1			1
ct	#1	#2	#3	#4	#5
1 st Q. 2004	0	0	72	0	1,920
2 nd Q. 2004	12	_18	408	24	1,188
3 rd Q. 2004	78	0	6	0	276
4 th Q. 2004	24	66	390	276	198
1 st Q. 2005	912	156	12	486	468
2 nd Q. 2005	258	234	12	492	3,396
3 rd Q. 2005	30	0	0	360	822
4 th Q. 2005	0	_ 6	36	1,446	894
1 st Q. 2006	0	0	0	294	1,122
2 nd Q. 2006	246	_0	0	240	930
3 rd Q. 2006	0	0	0	630	1,272
4 th Q. 2006	0	0	0	822	984
1 st Q. 2007	0	0	0	348	60
2 nd Q. 2007	144	204	114	876	60
3 rd Q. 2007	0	0	0	678	492
4 th Q. 2007	0	24	180	756	204
1 st Q. 2008	336	78	0	888	1,692
2 nd Q. 2008	132	0	132	6	120
3 rd Q. 2008	90	72	36	126	282

Table 2: Minutes of Violations of Opacity Limit for Lake Shore Station:

Quarter/Year	Stack #1
1 st Q. 2004	942
2 nd Q. 2004	1,620
3 rd Q. 2004	1,134
4 th Q: 2004	1,836
1 st Q. 2005	2,298
2 nd Q. 2005	2,112
3 rd Q. 2005	2,706
4 th Q. 2005	2,094
1 st Q. 2006	2,634
2 nd Q. 2006	552
3 rd Q. 2006	2,886
4 th Q. 2006	1,308
1 st Q. 2007	2,664
2 nd Q. 2007	2,676
3 rd Q. 2007	1,656
4 th Q. 2007	1,518
1 st Q. 2008	1,554
2 nd Q. 2008	1,134
3 rd Q. 2008	1,524

Table 3: Minutes of Violations of Opacity Limit for Bay Shore Station:

Quarter/Year	Common Stack
1 st Q. 2006	768
2 nd Q. 2006	1,254
3 rd Q. 2006	978
4 th Q. 2006	606
1 st Q. 2007	360
2 nd Q. 2007	666
3 rd Q. 2007	912
4 th Q. 2007	942
1 st Q. 2008	492
2 nd Q. 2008	390
3 rd Q. 2008	450

Table 4: Minutes of Violations of Opacity Limit for Ashtabula Station:

Quarter/Year	Stack #1
1 st Q. 2004	174
2 nd Q. 2004	102
3 rd Q. 2004	42
4 th Q. 2004	30
1 st Q. 2005	24
2 nd Q. 2005	252
3 rd Q. 2005	126
4 th Q. 2005	336
1 st Q. 2006	480
2 nd Q. 2006	234
3 rd Q. 2006	72
4 th Q. 2006	198
1 st Q. 2007	864
2 nd Q. 2007	114
3 rd Q. 2007	120
4 th Q. 2007	66
1 st Q. 2008	210
2 nd Q. 2008	30
3 rd Q. 2008	24

VIOLATIONS

Violations of Prevention of Significant Deterioration Requirements

- 68. The physical changes and/or changes in the method of operation described in the attached Appendices A through D, caused a significant net emissions increase, as defined at 40 C.F.R. §§ 52.21(b)(3)(i) and (b)(23)(i), of SO_2 , NO_x , PM, PM_{10} , and/or $PM_{2.5}$.
- 69. The projects described in Appendices A through D, each constituted a "major modification," as that term is defined at 40 C.F.R. § 52.21(b)(2)(i).
- 70. For each of the modifications described in Appendices A through D, First Energy failed to obtain a PSD permit as required by 40 C.F.R. § 52.21(i)(1).
- 71. First Energy violated and continues to violate Section 165(a) of the Act, 42 U.S.C. § 7475(a) and 40 C.F.R. § 52.21(i)(1) by constructing major modifications to existing major sources at the above-listed facilities without applying for or obtaining the PSD permits and operating the modified facilities without installing BACT or going through PSD review, and installing appropriate emission control equipment in accordance with a BACT analysis.

72. Each of the violations exist from at least the date of the start of construction of each modification and continue until the appropriate PSD permit is obtained and the necessary pollution control equipment is installed and operated.

Violations of Nonattainment New Source Review Requirements

- 73. The physical changes and/or changes in the method of operation described in the attached Appendices A through D, caused a significant net emissions increase, as defined by OAC 3745-31-01, of SO₂, PM, PM₁₀, and/or PM_{2.5}.
- 74. The projects described in Appendices A through D, each constituted a "major modification," as that term is defined by OAC 3745-31-01.
- 75. For the projects described in Appendices A through D, during the dates listed in Paragraphs 48 thru 56, First Energy did not install LAER for SO₂, PM, PM₁₀, and/or PM_{2.5}.
- 76. For the projects described in Appendices A through D, during the dates listed in Paragraphs 48 thru 56, First Energy did not offset the significant net emissions increase of SO₂, PM, PM₁₀, and/or PM_{2.5}.
- 77. First Energy violated and continues to violate OAC 3745-31-05 by constructing a major modification on the units described in Appendices A through D, during the dates listed in Paragraphs 48 thru 56, without, among other things, achieving LAER and obtaining offsets of significant net emissions of SO₂, PM, PM₁₀, and/or PM_{2.5}.
- 78. Each of the violations exist from at least the date of the start of the construction of each modification and continue until the appropriate NNSR permit is obtained and the necessary pollution control equipment is installed and operated.

Violations of the Title V Provisions

- 79. Each of the facilities identified above is a "major source" as defined in Section 501(2) of the Act, 42 U.S.C. § 7661(2) and 40 C.F.R. § 70.2.
- 80. Since August 15, 1996, First Energy has failed to submit timely and complete Title V permit applications for the Eastlake, Lake Shore, Bay Shore and Ashtabula generating stations with information pertaining to the modifications identified in Appendices A through D and with information concerning all applicable requirements, including, but not limited to, the requirement to apply, install and operate BACT or LAER for NO_X, SO₂, PM, PM₁₀, and/or PM_{2.5} at the plants and also failed to supplement or correct the Title V permit applications for these plants in violation of Sections 502, 503 and 504 of the Act, 42 U.S.C. §§ 7661a,7661b and 7661c; the regulations at 40 C.F.R. Part 70, including, but not limited to,

40 C.F.R. §§ 70.1(b), 70.5(a), (b) and (c), and 70.6 and 70.7(b); and the Ohio Title V provisions at OAC 3745-77.

81. First Energy also violated the Title V permits for the Eastlake, Lake Shore, Bay Shore and Ashtabula generating stations by exceeding the 20% opacity limitation (based on a 6-minute average).

Violations of Opacity and Particulate Matter Emissions Standards

- 82. The Tables, above, identify the number of minutes of emissions in violation of OAC 3745-17-07(A) based on reports of emissions in excess of the 20%, opacity limitation (based on a 6-minute average) submitted by First Energy to the OEPA for First Energy's Eastlake, Lakeshore, Bay Shore and Ashtabula generating stations.
- 83. First Energy's Eastlake, Lakeshore, Bay Shore and Ashtabula generating stations are subject to and in violation of OAC 3745-17-07(A), for, at least, the number of minutes identified in Tables 1-4, above. These violations only include the particulate matter emissions in excess of the 20%, 6 minute average limitation as reported by First Energy in excess emission reports.

ENFORCEMENT AUTHORITY

- 84. Sections 113(a)(1) and (3) of the Act, 42 U.S.C. §§ 7413(a)(1) and (3), provide that the Administrator may issue an administrative penalty order pursuant to Section 113(d), 42 U.S.C. § 7413(d), or bring a civil action pursuant to Section 113(b), 42 U.S.C. § 7413(b), for injunctive relief and/or civil penalties whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of, *inter alia*, the PSD requirements of Section 165(a) of the Act, 42 U.S.C. § 7475(a); Title V of the Act, 42 U.S.C. §§ 7661-7661f, or any rule or permit issued thereunder; or the PSD provisions of the Ohio SIP. See also 40 C.F.R. § 52.23.
- 85. Section 113(b) of the Act, 42 U.S.C. § 7413(b), authorizes the Administrator to initiate a judicial enforcement action for a permanent or temporary injunction, and/or for a civil penalty of up to \$25,000 per day for each violation occurring on or before January 30, 1997; up to \$27,500 per day for each such violation occurring on or after January 31, 1997 and up to and including March 15, 2004; up to \$32,500 per day for each such violation occurring on or after March 16, 2004 through January 12, 2009; and up to \$37,500 per day for each such violation occurring on or after January 13, 2009, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701, 40 C.F.R. § 19.4, and 74 Fed. Reg. 626 (Jan. 7, 2009) against any person whenever such person has violated, or is in violation of, *inter alia*, the requirements or prohibitions described in the preceding paragraph.

86. Section 167 of the Act, 42 U.S.C. § 7477, authorizes the Administrator to initiate an action for injunctive relief, as necessary to prevent the construction, modification or operation of a major emitting facility which does not conform to the PSD requirements in Part C of the Act.

Dated

heryl L. Newton

Director

Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Notice of Violation and Finding of Violation, No. **EPA-5-09-OH-20**, by Certified Mail, Return Receipt Requested, to:

FirstEnergy Corporation Douglas J. Weber, Attorney 76 South Main Street Akron, Ohio 44308

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

First Energy Corporation Michael Horvath, P.E., Director Environmental Projects 76 South Main Street Akron, Ohio 44308

Robert Hodanbosi, Chief Division of Air Pollution Control Ohio Environmental Protection Agency P.O. Box 1049 Columbus, Ohio 43138 (Without Appendices)

On the 13th day of August, 2009

Betty Williams, Administrative

Program Assistant

CERTIFIED MAIL RECEIPT NUMBER: 100/0320 0005 8916 0348